## AN ESKIMO STRIKE-A-LIGHT FROM CAPE BATHURST.

## BY WALTER HOUGH.

The natives of the Straits of Magellan and the Eskimo of Cape Bathurst are among the very few races that procure fire by means of flint, pyrites, and tinder. The use of the fire-drill is almost universal; it is so with the flint and steel; but rare are the instances of the more primitive invention, the pyrites or fire-stone, instead of the steel.

Capt. E. P. Herendeen collected at Cape Bathurst, north latitude  $70^{\circ} 40'$ , longitude  $127^{\circ} 30'$ , a very rarely-visited locality and the limits of the western Eskimo, a nice lot of fur clothing. In the consignment was an Eskimo fire-bag, that is, a pouch containing the implements necessary to get a spark to light a pipe or a fire. The essential parts

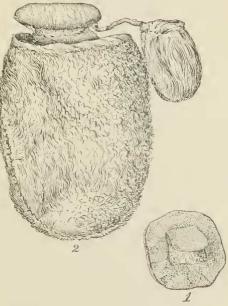


FIG. 1. Tinder pocket. FIG. 2. Fire bag.

are a piece of pyrites, a piece of flint, and tinder. The latter is made of the seed-down of an arctic plant, or frequently of willow catkins. It is prepared by carefully picking it and then soaking it in a strong solution of gunpowder in water to make it "quick," though this procedure is an innovation. The natives on the Putnam or Kuwũk River, in the region explored lately by Lieut. George M. Stoney, U. S. Navy, mix powdered charcoal with their willow catkin tinder, as do the natives at Point Barrow.\* It is then put into a little, round, flat pouch, with a flap in the middle of one side (Fig. 1). The pyrites (Fig. 3) looks like a short pestle, into which shape it has been worn by the repeated scrapings it has received. The upper end has a natural concavity, while the lower end is as smooth as though it had been used for trituration.

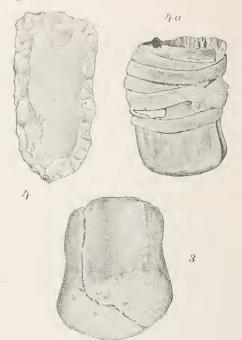


FIG. 3. Pyrites. FIGS. 4 4a. Flint striker and bandle.

The flint (Fig. 4) is an oblong piece, square at one end and rounded at the other. It is well chipped and was evidently made for this purpose, though away from its surroundings as used it would be provisionally classed as a scraper, though not a skin-scraper blade, as it is chipped on both sides. Dr. J. Simpson, in the Arctic Blue Book, says that flints are brought from the Kuwük River. Mr. Murdoch tells me that the Eskimo think that pyrites comes down from heaven in meteors, and for this reason they call it fire-stone. Two pieces of the latter are often used for striking fire. A native told Mr. Murdoch that in old times they did not use flint, but two pieces of pyrites, and got "big fire." The pieces of flint used at Point Barrow are small and are not fixed in a handle. The flint under consideration is mounted in a short wooden handle (Fig. 4a), of two pieces, rudely dressed down with a flint tool, as may be seen from the character of the entting, which is striated, as though done with a serrated edge. This is corroborative evidence to that of Captain Herendeen, who says that this is a genuine relic of the times before the use of the steel was known to the natives, which has not

<sup>\*</sup> Report of the Expedition to Point Barrow, Alaska, Lient. P. H. Ray, U. S. Army, p. 46.

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been long on the extreme arctic coast whence this specimen comes. The bag (Fig. 2) is made of the scrotum of the reindeer. The little bag which hangs attached to the larger has a double use: it is a receptacle for tinder, but its chief use is as a toggle; being passed under the belt it prevents the loss of the outfit, which is carried by the women.

An oblong pad stuffed with deer hair is sewed to the mouth of the fire-bag to protect the hand from sparks and blows of the flint.



FIG. 5. Using the strike-a-light.

To get a spark the Eskimo places the piece of pyrites on the pad held in the left hand over the curved forefinger (Fig. 5); it is placed large end down and the thumb set in the cup cavity in the top. The flap of the tinder pocket is turned back and held on the forefinger under the protecting pad. The flint is held in the right hand and by a scraping motion little pieces of pyrites at a dull red heat fall down into the tinder. The pellet that glows is transferred to the pipe or fire, and the flap of the tinder pocket is turned down, serving to keep the tinder dry and to extinguish it if necessary.

It is a rare and complete fire-making set, and in the minutiæ and number of accessories shows true Eskimo elaboration, though in detail rudely made. Professor Mason remarks on Eskimo ingenuity that the Australians and Puru-Puru were satisfied with the simplest form of throwing-stick, while the Eskimo have invented a dozen different species with numerous co-ordinating attachments on the spear.\* This is also a good example of independence of invention by the Fuegians, and the hyperboreans. The former could use no other means, in that supersaturated atmosphere it is impossible to get a spark by means of a drill.<sup>†</sup> At Cape Bathurst the cause of the abandonment of the fire drill

<sup>\*&</sup>quot;Resemblances in Arts Widely Separated." American Naturalist, Mar. 1886, p. 251. †Peschel "The Races of Men," p. 148, cites W. P. Snow's "Off Tierra del Fuego," II, p. 360.

was the extreme difficulty and tediousness of getting fire in that way. The Museum is in possession of a specimen of flint and pyrites from Fort Simpson, a station on the Upper Mackenzie River. It was collected from the Indians by R. B. Ross many years ago.\* Another outfit, consisting of a bag with pyrites and bark tinder, was collected in Alaska by John J. McLean, and is presumably Indian.† It is possible that these throw some light on the Indian origin of some of the Eskimo arts, a matter not unlikely to happen, as it is of common observation that the Eskimo is adaptive and it is quite to be expected that there would be reciprocal borrowing of useful arts by neighboring tribes.

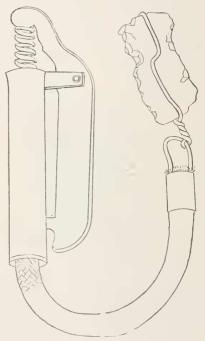


FIG. 6. French "Strike-a-light."

The cigar lighter (Fig. 6), called a strike-a-light, purchased in Paris by Mr. Thomas Wilson, is introduced here to show the survival of a primitive custom. The inhabitant of the avenue de l'Opera, in the "capital of civilization," and he of the shores of the frozen ocean touch. One of the chief qualities of civilization is its adaptiveness, and there is no device of savage man which civilized man can not appropriate and mold to his own use; but the remains of old usages and arts stick to him and come down if not in ethnical sequence yet in direct course from the man acquainted with the use and properties of flint, for instance in the valley of the Somme.

Museum No. 128,405. Fire-making outfit, Cape Bathurst, E. P. Herendeen.

<sup>\*</sup> No. 1,861. Fire-making ontfit, Fort Simpson, British America, R. B. Ross. † No. 60,232. Fire-making ontfit, Alaska, J. J. McLean.